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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/684,044 | 10/06/2000 | Eilaz Babaev | 24149-11 | 3047 |

7590 04/23/2004

George Likourezos
Carter Deluca Farrell & Schmidt LLP
445 Broad Hollow Road
Suite 225
Melville, NY 11747

EXAMINER

THOMPSON, MICHAEL M

ART UNIT PAPER NUMBER

3763

DATE MAILED: 04/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/684,044

Applicant(s)

BABAEV, EILAZ

Examiner

Michael M. Thompson

Art Unit

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43, 50-53 and 59 is/are pending in the application.
- 4a) Of the above claim(s) 2-3, 5, 7-13, 15-20, 22, 24, 26-31, 33-39, 43, 53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6, 14, 21, 23, 25, 32, 40-42, 50-52 and 59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 6, 14, 50-52, and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Durley, III. (4,085,893). Durley, III. teaches a nozzle for ultrasound production of a sprayed liquid comprising a main body (Figures 1, 7, and 10) wherein the main body is close to the free distal end of the ultrasound transducer with an opening or dispensing orifice is at the most distal end of the transducer. He teaches a valve (170) controlling the flow rate of the solution being delivered to the transducer, the main body being connected to at least one reservoir (column 11) for delivering an atomized solution.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 21, 23, 25, 32, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Durley, III. Durley, III. teaches all of the limitations of the claims except for

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explicitly designating the nozzle is made of one piece and whether or not the nozzle is sterile, sterilizable, or disposable, a reservoir on top or on the side, or a rigidly connected reservoir. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide a rigidly connected reservoir or a reservoir on the top or side of the device because Applicant has not disclosed that positioning the reservoir on the top or side or providing a rigidly connected reservoir provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with a port on the bottom side or any side and a flexibly connected reservoir because the ability of the opening to convey liquid to the ultrasound transducer tip is not affected by the reservoirs location or rigidity. Therefore, it would have been an obvious matter of design choice to modify Durley, III. To obtain the invention as specified in the claims.

It would have further been obvious to one having ordinary skill in the art, at the time the invention was made to make the nozzle as one piece, since it has been held that one-piece construction, in place of separate elements fastened together, is a design consideration within the skill of the art. In re Kohno, 391 F.2d 959, 157 USPQ 275 (CCPA 1968); In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965). Furthermore, it is well known that dental tools are expected to be sterile and sterilizable while the disposability of an apparatus is delegated to the practitioner.

Terminal Disclaimer

5. The terminal disclaimers filed on February 11, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent No's. 6,569,099; 6,601,581; 6,663,554 have been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Arguments

6. Applicant's arguments filed February 11, 2004 have been fully considered but they are not persuasive. The Examiner respectfully disagrees with Applicant's arguments that the Durley, III device does not teach the water or other liquid directed at the most distal end and the devices being connected to or in fluid communication with the reservoir or holder for holding liquid. On the contrary Figure 10 shows the water being directed to the most distal end of the device at the distal tip. If the flow were even higher the water would exit the tube or pipe (16) toward the distal direction in an even greater amount. Durley, III. also teaches the transducer including the tail end mass (26) and front end mass (22) which includes vibratory member (14) constituting the "ultrasound transducer tip." He further teaches that the device may "be used in all other types of humidifiers ... is well adapted for use in portable unit ... the humidifier can readily be adapted for use with any collapsible water reservoir." It is clear from these statements that the device may be used with and may be connected to a reservoir. Furthermore, the device may be contained or coaxially placed within a main body/holder of a device that supplies the reservoir,

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etc. to expel the fluid within the reservoir wherein the transducer is separable from the main body/holder.

Contacts

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael Thompson whose telephone number is (703) 305-1619. The Examiner can normally be reached on Monday through Friday from 9 am to 5 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Primary, Brian Casler, can be reached on (703) 308-3552. The official fax phone number for all submissions to the organization where this application or proceeding is assigned is (703) 872-9306.

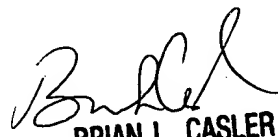
Michael M. Thompson

Patent Examiner

MT



April 22, 2004



BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700